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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/615,677	07/14/2000	Moises Goldszmidt	22436-708	6978

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EXAMINER	
ZIA, SYED	

ART UNIT	PAPER NUMBER
2131	7

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/615,677	GOLDSZMIDT ET AL.	
	Examiner	Art Unit	
	Syed Zia	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to application filed on July 17, 2000. Original application contained Claims 1-16. Therefore, Claims 1-16 are pending for further consideration.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Hellerstein et al. (U. S. Patent 6,430,615).

3. Regarding Claim 1 Hellerstein teach and describe a method for determining a number of future content requests that will arrive at an information delivery system for a pre determined future period of time, comprising:

- creating a plurality of models to predict a number of future content requests (col.8 line 45 to col.9 line 6, and col.12 line 10 to line 40);

- determine for each a model its respective prediction for the pre-determined future period of time (col.9 line 12 to line 33, and col.12 line 41 to line 67);

- selecting a model from the plurality of models which has a least error associated with its prediction to create a best model predictive assessment of the next interval's number of content requests (col.14 line 42 to line 63, and col.15 line 61 to col.16 line 33);

- adding the number of current content requests with the predicted future content requests to create an aggregate total number of content requests; and sending the aggregated total number of content requests to a capacity function (col.18 line 17 to line 33).

4. Regarding Claim 11 Hellerstein teach and describe a method for determining a number of future content requests that will arrive at an information delivery system for a pre determined future period of time, comprising:

- receiving a user's quality of service objectives at the information system, creating a plurality of models to predict a number of future content requests (col.8 line 45 to col.9 line 6, and col.12 line 10 to line 40);

- determine for each a model its respective prediction for the pre determined future period of time (col.9 line 12 to line 33, and col.12 line 41 to line 67);

- selecting a model from the plurality of models which has a least error associated with its prediction to create a best model predictive assessment of the next interval's number of content requests (col.14 line 42 to line 63, and col.15 line 61 to col.16 line 33);

- adding the number of current content requests with the predicted future content requests to create an aggregate total number of content requests, sending the aggregated total number of content requests to a capacity function, determining if a content request is for an existing session or a new session; and sending the content request to a dispatch control function at the information system when the content request is for an existing session (col.18 line 17 to line 33).

5. Claims 2-10, and 12-16 are rejected applied as above rejecting Claims 1, and 11. Furthermore, Hellerstein teach and describe a predictive model based measurement acquisition wherein:

- the least error is a measured number of content requests- a predicted number of content requests, and the least error is a method to determine accuracy of a model that predicts the number of content requests; and the least error is determined: by observing of the number of content requests during a selected time period and then comparing the number of content requests observed with a predicted number of content requests, at an instant period of time, over a period of time; and the least error changes with modifications of a user's quality of service objectives, and with modifications to the information system (col.5 line 9 to line 61).

- selecting the model includes construction of a probability distribution over a set of predictive models, and construction of the probability distribution determines the accuracy of the plurality of models and a stochastic selection of the plurality of models according to the probability distribution (col.12 line 41 to line 67);

- the user's quality of service objectives include: speed of content delivery for a specified time, consistency of speed of content delivery, a function of number of concurrent users, system response time, and system response time consistency (col.13 line 1 to line 65).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Zia whose telephone number is 703-305-3881. The examiner can normally be reached on Monday - Friday 9:00 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sz
May 12, 2004

AYAZ SHEIKH
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